CLAIMS

1   1.   (ORIGINAL) A computer-implemented method for generating a transformation

2   document, comprising:

3   analyzing a first document;

4   analyzing a second document; and

5   automatically generating, based upon said first and second documents, a

6   transformation document which, when processed in conjunction with said first document,

7   gives rise to a result document that is at least an approximation of said second document.

1   2.   (ORIGINAL) The method of claim 1, wherein said first and second documents are

2   XML (eXtensible Markup Language) documents.

1   3.   (ORIGINAL) The method of claim 2, wherein said transformation document is an

2   XSLT (eXtensible Stylesheet Language Transformation) document.

1   4.   (ORIGINAL) The method of claim 1, wherein automatically generating said

2   transformation document comprises:

3   selecting a particular data structure pattern that occurs in said second document;

4   determining whether said first document comprises a matching data structure pattern

5   that matches said particular data structure pattern; and

6   in response to a determination that said first document comprises said matching data

7   structure pattern, inserting a template comprising one or more actions into said

8   transformation document, said template being invoked when a particular triggering data

9   structure pattern is encountered during processing of said transformation document, and

10   when invoked, causes said particular data structure pattern to be created in said result

11   document.

1   5.   (ORIGINAL) The method of claim 4, wherein said particular triggering data

2   structure pattern comprises said matching data structure pattern.

1   6.   (PREVIOUSLY PRESENTED) The method of claim 4, wherein automatically

2   generating said transformation document further comprises:

3   in response to a determination that said first document does not comprise said

4   matching data structure pattern, inserting a non-match template comprising one or more

5   actions into said transformation document, said non-match template which indicates to a

6   user that a triggering data structure pattern needs to be specified for said non-match

7   template, said non-match template, if invoked, causing said particular data structure pattern

8   to be created in said result document.

1   7.   (CANCELED)

1   8.   (ORIGINAL) The method of claim 4, wherein automatically generating said

2   transformation document comprises:

3   selecting a non-matching data structure pattern that occurs in said first document that

4   does not match any data structure pattern that occurs in said second document; and

5   inserting an action-needed template into said transformation document, said action-

6   needed template being invoked when said non-matching data structure pattern is

7   encountered during processing of said transformation document, said action-needed

8   template comprising an indication that one or more actions needs to be specified for said

9   action-needed template.

1   9.   (ORIGINAL) The method of claim 1, wherein automatically generating said

2   transformation document comprises:

3   selecting a particular data structure pattern that occurs in said second document;

4   determining a synonymous data structure pattern that is synonymous with said

5   particular data structure pattern;

6   determining whether said first document comprises a matching data structure pattern

7   that matches said synonymous data structure pattern; and

8   in response to a determination that said first document comprises said matching data

9   structure pattern, inserting a template comprising one or more actions into said

10   transformation document, said template being invoked when a particular triggering data

11   structure pattern is encountered during processing of said transformation document, and

12   when invoked, causes said particular data structure pattern to be created in said result

13   document.

1   10.   (ORIGINAL) The method of claim 9, wherein said particular triggering data

2   structure pattern comprises said matching data structure pattern.

1   11.   (ORIGINAL) The method of claim 9, wherein determining said synonymous data

2   structure pattern comprises:

3   accessing a set of information that indicates that said particular data structure pattern

4   is synonymous with said synonymous data structure pattern.

1   12.   (ORIGINAL) The method of claim 11, wherein said set of information is provided

2   by a user.

1   13.   (ORIGINAL) The method of claim 1, wherein automatically generating said

2   transformation document comprises:

3   determining whether any data structure pattern occurring in said first document is

4   identical to a data structure pattern occurring in said second document; and

5   in response to a determination that a particular data structure pattern occurring in

6   said first document is identical to a data structure pattern occurring in said second document,

7   inserting a template into said transformation document, said template comprising a copy

8   action, said template being invoked when said particular data structure pattern is

9   encountered during processing of said transformation document, and when invoked, causes

10   said particular data structure pattern to be copied into said result document.

1   14.   (ORIGINAL) The method of claim 1,

2   wherein analyzing said first document comprises:

3   compiling a first list of data structure patterns that occur in said first

4   document; and

5   wherein analyzing said second document comprises:

6   compiling a second list of data structure patterns that occur in said second

7   document.

1   15.   (ORIGINAL) The method of claim 1, further comprising:

2   processing said transformation document in conjunction with a third document to

3   derive a transformed document, wherein said third document is a different document from

4   said first document.

1   16.   (ORIGINAL) The method of claim 15, wherein said first document is of a particular

2   type, and wherein said third document is of the same particular type.

1   17.   (ORIGINAL) A computer readable medium comprising instructions which, when

2   executed by one or more processors, cause the one or more processors to generate a

3   transformation document, said computer readable medium comprising:

4   instructions for causing one or more processors to analyze a first document;

5   instructions for causing one or more processors to analyze a second document; and

6   instructions for causing one or more processors to automatically generate, based

7   upon said first and second documents, a transformation document which, when processed in

8   conjunction with said first document, gives rise to a result document that is at least an

9   approximation of said second document.

1   18.   (ORIGINAL) The computer readable medium of claim 17, wherein said first and

2   second documents are XML (eXtensible Markup Language) documents.

1   19.   (ORIGINAL) The computer readable medium of claim 18, wherein said

2   transformation document is an XSLT (eXtensible Stylesheet Language Transformation)

3   document.

1   20.   (ORIGINAL) The computer readable medium of claim 17, wherein the instructions

2   for causing one or more processors to automatically generate said transformation document

3   comprises:

4   instructions for causing one or more processors to select a particular data structure

5   pattern that occurs in said second document;

6   instructions for causing one or more processors to determine whether said first

7   document comprises a matching data structure pattern that matches said particular data

8   structure pattern; and

9   instructions for causing one or more processors to insert, in response to a

10   determination that said first document comprises said matching data structure pattern, a

11   template comprising one or more actions into said transformation document, said template

12   being invoked when a particular triggering data structure pattern is encountered during

13   processing of said transformation document, and when invoked, causes said particular data

14   structure pattern to be created in said result document.

1   21.   (ORIGINAL) The computer readable medium of claim 20, wherein said particular

2   triggering data structure pattern comprises said matching data structure pattern.

1   22.   (PREVIOUSLY PRESENTED) The computer readable medium of claim 20,

2   wherein the instructions for causing one or more processors to automatically generate said

3   transformation document further comprises:

4   instructions for causing one or more processors to insert, in response to a

5   determination that said first document does not comprise said matching data structure

6   pattern, a non-match template comprising one or more actions into said transformation

7   document, said non-match template specifying a special triggering data structure pattern

8   which indicates to a user that a triggering data structure pattern needs to be specified for said

9   non-match template, said non-match template, if invoked, causing said particular data

10   structure pattern to be created in said result document.

1   23.   (CANCELED)

1   24.   (ORIGINAL) The computer readable medium of claim 20, wherein the instructions

2   for causing one or more processors to automatically generate said transformation document

3   comprises:

4   instructions for causing one or more processors to select a non-matching data

5   structure pattern that occurs in said first document that does not match any data structure

6   pattern that occurs in said second document; and

7   instructions for causing one or more processors to insert an action-needed template

8   into said transformation document, said action-needed template being invoked when said

9   non-matching data structure pattern is encountered during processing of said transformation

10   document, said action-needed template comprising an indication that one or more actions

11   needs to be specified for said action-needed template.

1   25.   (ORIGINAL) The computer readable medium of claim 17, wherein the instructions

2   for causing one or more processors to automatically generate said transformation document

3   comprises:

4   instructions for causing one or more processors to select a particular data structure

5   pattern that occurs in said second document;

6   instructions for causing one or more processors to determine a synonymous data

7   structure pattern that is synonymous with said particular data structure pattern;

8   instructions for causing one or more processors to determine whether said first

9   document comprises a matching data structure pattern that matches said synonymous data

10   structure pattern; and

11   instructions for causing one or more processors to insert, in response to a

12   determination that said first document comprises said matching data structure pattern, a

13   template comprising one or more actions into said transformation document, said template

14   being invoked when a particular triggering data structure pattern is encountered during

15   processing of said transformation document, and when invoked, causes said particular data

16   structure pattern to be created in said result document.

1   26.   (ORIGINAL) The computer readable medium of claim 25, wherein said particular

2   triggering data structure pattern comprises said matching data structure pattern.

1 27. (ORIGINAL) The computer readable medium of claim 25, wherein the instructions

2 for causing one or more processors to determine said synonymous data structure pattern

3 comprises:

4 instructions for causing one or more processors to access a set of information that

5 indicates that said particular data structure pattern is synonymous with said synonymous

6 data structure pattern.

1 28. (ORIGINAL) The computer readable medium of claim 27, wherein said set of

2 information is provided by a user.

1 29. (ORIGINAL) The computer readable medium of claim 17, wherein the instructions

2 for causing one or more processors to automatically generate said transformation document

3 comprises:

4 instructions for causing one or more processors to determine whether any data

5 structure pattern occurring in said first document is identical to a data structure pattern

6 occurring in said second document; and

7 instructions for causing one or more processors to insert, in response to a

8 determination that a particular data structure pattern occurring in said first document is

9 identical to a data structure pattern occurring in said second document, a template into said

10 transformation document, said template comprising a copy action, said template being

11 invoked when said particular data structure pattern is encountered during processing of said

12 transformation document, and when invoked, causes said particular data structure pattern to

13 be copied into said result document.

1 30. (ORIGINAL) The computer readable medium of claim 17,

2   wherein the instructions for causing one or more processors to analyze said first

3   document comprises:

4   instructions for causing one or more processors to compile a first list of data

5   structure patterns that occur in said first document; and

6   wherein the instructions for causing one or more processors to analyze said second

7   document comprises:

8   instructions for causing one or more processors to compile a second list of

9   data structure patterns that occur in said second document.

1   31.   (ORIGINAL) The computer readable medium of claim 17, further comprising:

2   instructions for causing one or more processors to process said transformation

3   document in conjunction with a third document to derive a transformed document, wherein

4   said third document is a different document from said first document.

1   32.   (ORIGINAL) The computer readable medium of claim 31, wherein said first

2   document is of a particular type, and wherein said third document is of the same particular

3   type.